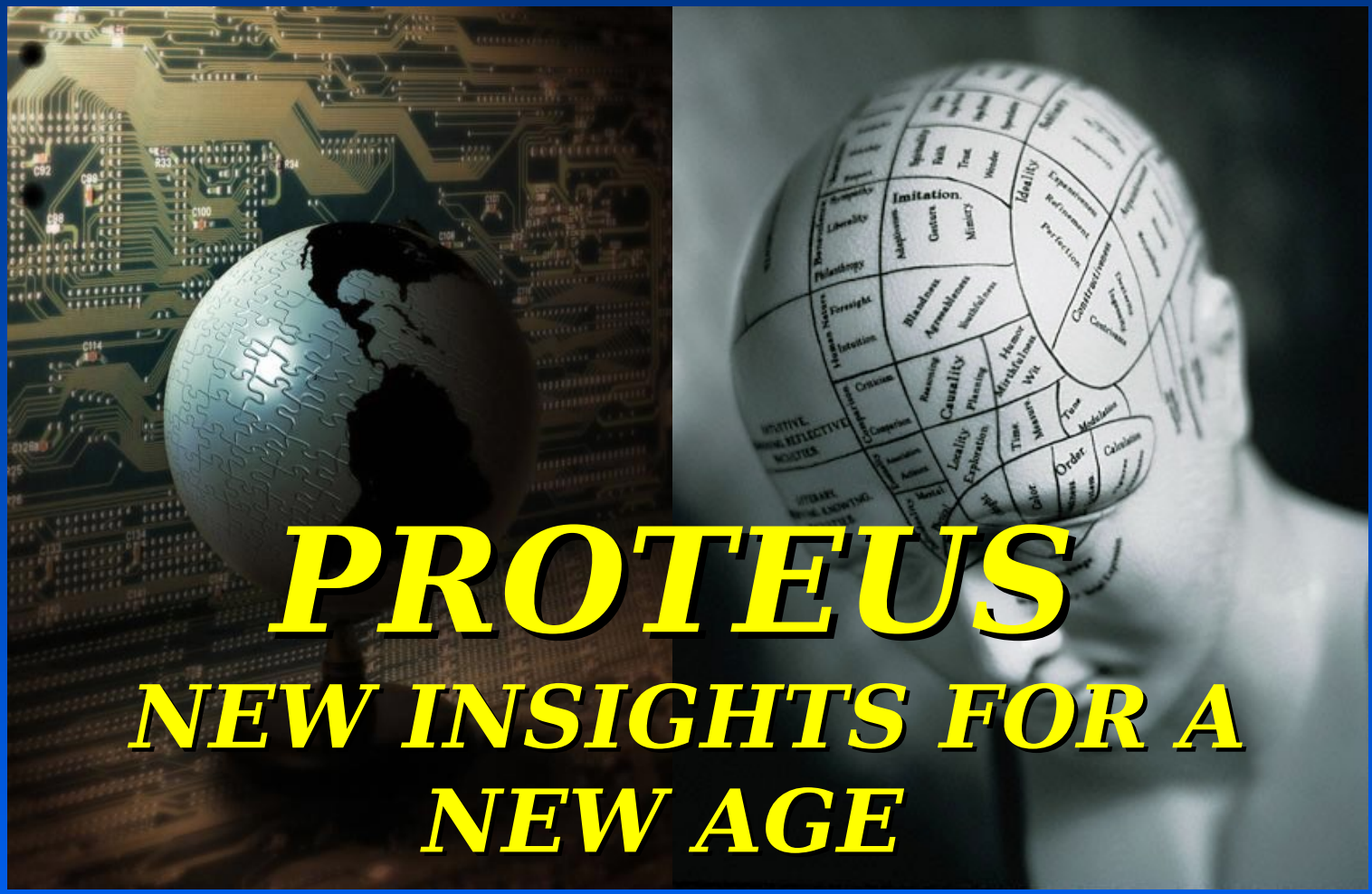
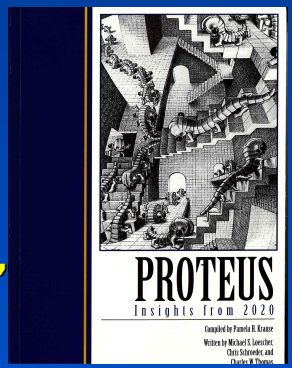

PROTEUS
NEW INSIGHTS FOR A NEW AGE

History of Proteus

- 1999-2002: National Reconnaissance Office (NRO) initiated a study to examine the future geo-strategic landscape and its characteristics out to 2020.

- Experts in U.S. Gov/DOD, Private Sector, and Academia teamed with Deloitte, TASC. and the Copernicus Institute to develop:
  - ✓ Proteus I: five futuristic world scenarios; gathered nine original Insights
  - ✓ Proteus II: subsequent to 9/11, GWOT, and Operations in Iraq and Afghanistan; a tenth insight: "Threats and Opportunities"

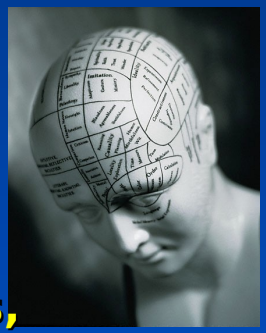


- 2003–2004: International Consortium (U.S. & Canada) formed to study and collaborate on the practical application of Proteus insights:
  - ✓ to future strategic intelligence, decision-making and technology efforts
  - ✓ to better understand and deal with future ambiguity and uncertainty

- 2005: Proteus Canada followed by the Proteus Management Group (U.S.& Canada) Sponsored by the DNI and CSL, USAWC

Proteus Management Group

2007 Charter and Objectives



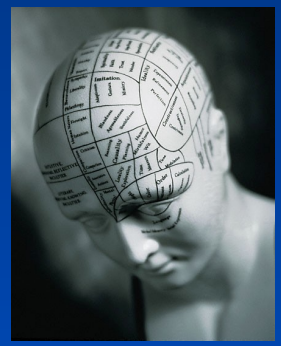
- **The Proteus Management Group (PMG) is an international consortium and "think tank" that promotes further discourse, study, and research, focusing on the refinement , development, and application of Proteus Insights (PI) and related new and emerging "futures" concepts, methods, processes, and scenarios that will:**
  - **Assist strategic and high-operational level decision makers, planners, and analysts in "outside the box" consideration and critical analysis of National military and intelligence issues within the Joint, Interagency, Intergovernmental, and Multinational (JIIM) environment by encouraging them to:**
    - ✓ **Consider differing values and perceptions of future target audiences by systematically looking "outside" of the values contained in Western Civilization when considering the application of all elements of national power (Diplomatic, Informational, Military, and Economic).**
    - ✓ **Frame complex issues holistically, to identify and consider the 2nd and 3rd order effects and unintended consequences of policy and strategy decisions.**
    - ✓ **Scan the horizon and define the future environment and scenarios to systematically identify discrete threats and capitalize on hidden opportunities**

Proteus Management Group

The Future

“We're entering an age of acceleration. The models underlying society at every level, which are largely based on a linear model of change, are going to have to be redefined. Because of the explosive power of exponential growth, the 21st century will be equivalent to 20,000 years of progress at today's rate of progress; organizations have to be able to redefine themselves at a faster and faster pace.”

— Ray Kurzweil 2003



Complexity

“What we think of as design based on hidden patterns, once understood we will be able to achieve the desired effect.”

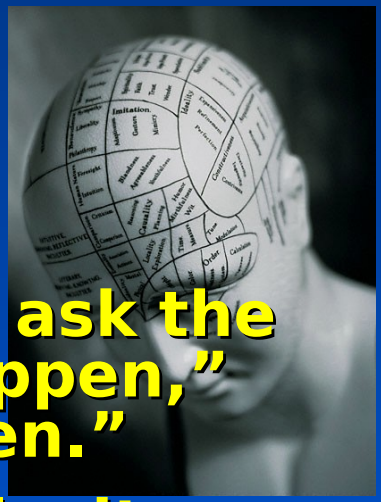
— Telecommunications Systems Engineer

Foresight

“The reason why the enlightened ruler and the wise general are able to conquer the enemy when ever they lead the army and to achieve victories that surpass those of others is because of foreknowledge”

— Sun Tzu

What is Proteus?



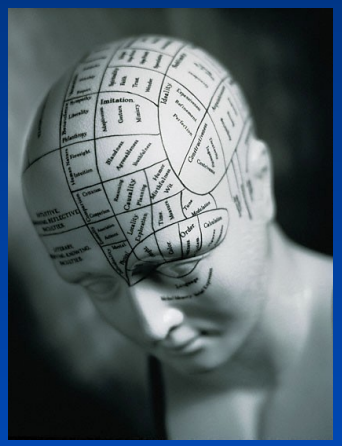
- 10 insights about the future geo-strategic environment of 2020.
- Analyst or decision support tool.
- Five Planes of Influence within to ask the questions :“What do I want to happen,” and “What do I not want to happen.”
- Critical thinking and future complexity oriented.
- Provides a framework for thinking “outside the box” or “creatively in the box” in a nonlinear complex environment.

"The Proteus Consortium"

PROTEUS MANAGEMENT GROUP

Associates and Follows

- US Army War College (lead and PM)
- CSL, DNSS, DCLM, SSI
- National Security Agency
- Office, Director National Intelligence
- National Research Council of Canada (Proteus & Foresight Canada)
- Royal Military Academy
- Central Intelligence Agency
- National Geospatial Intel Agency
- Naval Postgraduate School
- Cebrowski Institute
- National Reconnaissance Office
- TRADOC Futures /DCSINT & CAC
- Army G2/G3
- OSD (P), OASD SOLIC
- National Intel University (IC Colleges)
- Joint Military Intel College & JMITC
- Naval War College
- University of Maryland
- George Mason University
- George Washington University
- UT Dallas
- University of Virginia
- MIT
- Mitre
- L3 Communications
- Pratt & Whitney
- White Wolf Security
- Alidade Inc.
- Pearson Analytical Solutions
- New England Complex Sys. Instiute
- Mercyhurst College

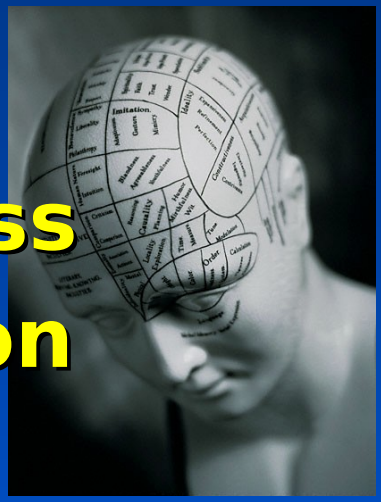


- Boeing Company
- Joint Special Ops University
- Northrop Grumman
- Applied Futures
- Center, International & Strategic Studies
- Nat'l Counter-Terrorism Center
- Open Source Academy
- Center, Emerging Threats /Opportunities , USMC
- MORS
- INSCOM

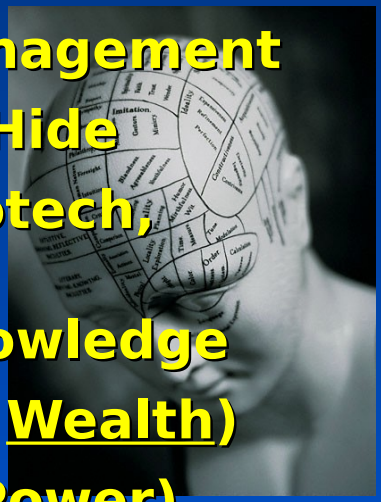
Others……

What Proteus is Not!

- Predictive or prescriptive
- A linear determined process
- Dependent on extrapolation of current trends
- A replacement for national security or military planning, analytical, or decision-making processes.



Ten Insights

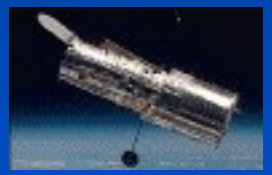


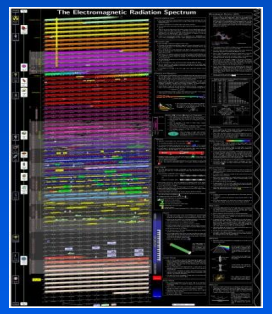
- Starlight: Foresight and Uncertainty Management
- Sanctuary: They Can Run and They Can Hide
- Sweat the Small Stuff: Cyber Beings, Biotech, Nanotech
- Veracity: The Challenge of Truth and Knowledge
- Power: The Secret of Cortez (often from Wealth)
- Wealth: It's not Just Money (influences Power)
- Herds: People and Ideas on the Move
- A Parallel Universe: From Networks to Cyber Life
- Bedfellows: The Significance of Teaming (diversity matters)
- Threat and Opportunity Clearly see Both Sides

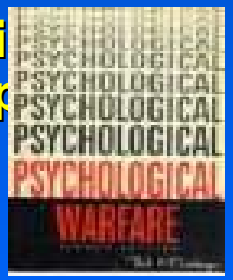
Planes of Influence

“Places” where friendly, hostile, or neutral actors seek to influence others.

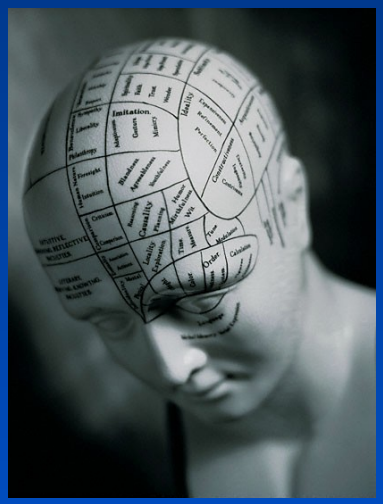
- **Terrestrial: The classic military and geo-political domains of land, air, sea as well as the physical concentrations of wealth (e.g., sea lanes, oil fields)**
- **Space: The domain of satellites and future space platforms**
- **Spectral: The electromagnetic spectrum where EW, bandwidth, frequency management, and sensing occur**
- **Virtual: The global world of networks and connectivity**
- **Psychological: The media and info conduit to the and r eop**







Five Scenarios

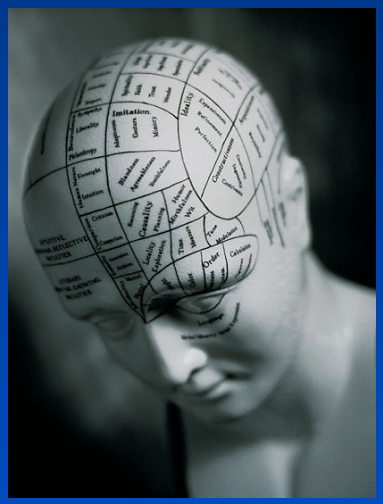


Amazon.Plague: The world is wracked by highly contagious, deadly viruses that flare up, die down, then return in mutated form. Trade and commerce have dried up and the global economy is in a serious, long-term recession. U.S. politics are equally divided between "Greens" and "Techs." The internet is the medium for [illegible] commerce, communication, and cooperation. The disease-ridden world.

The Enemy Within: The US has slowly, unexpectedly, and quite dramatically unraveled. Disagreements, ethnic tensions, and single-issue politics have torn the social fabric. Racial and inter-generational strife, compounded by record unemployment, has torn apart churches, Families, and neighborhoods. The Government [illegible] banking crisis.

Militant Shangri-la: The world is one of unexpected events and difficult-to-trace villains. The world is moving into a third decade of prosperity. The world is more and more influenced by the "Alliance of the Southern Constellation," nations considered pariahs by the West. The Alliance's grand strategy is to keep the world on the edge of chaos in order to reap profit and to kill the idea of personal liberty.

Five Scenarios (continued)



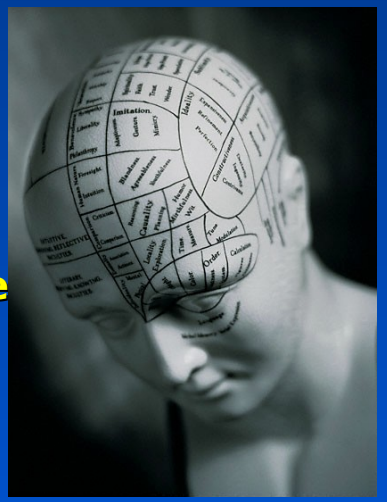
New Camelot: The world is a good place for most locations. The world is enjoying economic growth, international stability, technological progress, and the fruits of an energy breakthrough that promises cheap fuel and a clean environment. Large global corporations drive strong consumer markets and keep all things flowing across the borders. The US is no longer dominant militarily or economically, but no one cares.

Yankee Going Home: The world has changed in fundamental ways and is experiencing chaos. It is not clear who is running things or who the decision makers are, or even what goals are being pursued or who the friends are. The US has withdrawn from the world after a series of foreign policy blunders and a deep recession. The world is now controlled by both traditional and nontraditional actors who cooperate for power and influence while simultaneously competing for position and control in a constant whirl of politics and economics that is bewildering to nearly all concerned.

Know Thyself; Know Thy Enemy

The Nature of Blindness in Intelligence

- As a group, the participants had a propensity to find—or even create—traditional threats. In doing this, they tended to miss or misconstrue the nontraditional threats. Lessons:
  - ✓ When the *problem*—the background forces for change—is clear and the *threat* is clear, the group is comfortable but moves only slightly out of the box. (Amazon & New Camelot)
  - ✓ When the *problem* is clear and the *threat* is ambiguous, the group is uncomfortable, but engages in innovative thinking. (Militant Shangri-la & Yankee Going Home)
  - ✓ When the *problem* and the *threat* are ambiguous, there is a high level of discomfort and a tendency to default to the box. (New Camelot + Yankee Going Home)
  - ✓ When the *problem* is ambiguous and the *threat* is clear, debates about the mission ensue. (The Enemy Within)



Insight 1: Beyond Starlight

Foresight and Uncertainty Management

- In some cases, the catalyst will take a familiar form: a dramatic and obvious event. In others, subtle, incremental, and seemingly unrelated occurrences in multiple planes of influence will combine to create change.

- In all of the worlds, the global balance of political, economic, military, and cultural power (i.e. DIME) will be capable of being quickly and significantly altered.
- Some of the planes of influence are physical, some are psychological, and some are virtual. Threat patterns can often be identified when temporal connections emerge among events or transaction flows across multiple planes.
- It became apparent that a real danger lies in preoccupation with only one—or the wrong—plane of influence. One consequence will be an inability to recognize threat patterns until after the fact. Another will be the difficulty of acknowledging that a new threat exists at all.

Exploring Starlight

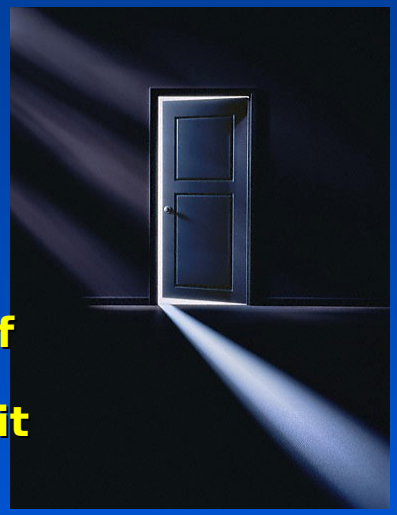
- Foresight and uncertainty management will become the objects of the intelligence cycle.
- The task will not merely be the cataloging of events, but more the recognition of patterns. As a result, given finite resources, sensors may be less important than the analysis of data.
- Pattern-finding is a function, in part, of expertise, in this case, in nontraditional areas such as economics, organizational theory, psychology, network topology, and complexity theory.
- If pattern-finding techniques are successful, you can miss some events and still understand the threat.
- Patterns are not only harder to find than events; they are harder to prove.
- Time is the analytical nexus of disparate events across multiple planes of influence.
- Reactive postures leave you vulnerable and sow the seeds of false security.

Insight 2: Sanctuary

They Can Run, and They *Can* Hide

"Sanctuary" is a way of thinking about informat

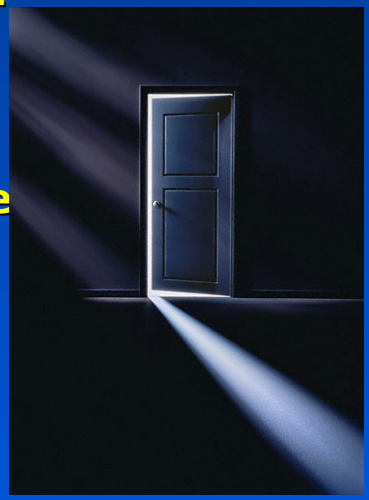
- In all of the worlds, the need for secrecy increased rather than decreased. Not only will there be more things of value that people will want to hide, but more entities will be interested in hiding them: from private citizens to NGOs, from corporations to nation states. The future will be an increasingly secretive place.
- Sanctuary will be extremely valuable in every aspect of public and private life, and it will be pursued as the antidote to an invasive world: "Life, liberty, the pursuit of happiness, and leave me alone."



- New venues for denial will arise at least as fast as the instruments of surveillance. Moreover, the things we will have to find in 2020 may not be physical or even virtual. Some (*e.g.*, information and wealth) will be temporal…but all leave trails.

Exploring Sanctuary

- Both discrete events and broad trends will be hidden by sanctuary.
- Across most of the worlds, certain conditions—such as the emergence of a knowledge-based economy, high mobility, blurred sovereignty, and confused loyalties—will lead to an inability to understand another actor's sense of what is valuable.
- Off-the-shelf denial and deception technologies will be accessible to most. Global expertise in technologies that provide sanctuary probably will increase.
- At the same time, the public will be less tolerant of intrusion and more suspicious of intelligence activities.
- Not knowing what you don't know complicates intelligence priorities by orders of magnitude. Thus, we will have to work harder to gain intelligence.



Insight 3: Sweat the Small Stuff

Cyber Beings, Biotech, Nanotech

- Across all of the worlds, it was clear that instruments of power and sources of threat will come in smaller and smaller packages—but with no lessening in lethality.

- Biological viruses are good examples of both instruments of power and source of threat that will be smaller and smaller. Sophisticated software agents, roaming future cyberspace, are also likely examples. Classic tools of state power (*e.g.*, weapons and surveillance systems) will be dramatically miniaturized as a result of both bio- and nanotechnology.

- Nanotechnology will produce macro effects—a fact that offers opportunities and presents challenges.

Exploring Small Stuff

- "Small Stuff" is a double-edged sword that will create both opportunities and threats. On one side, it may be our key to sustaining covertness. On the side, it offers others a whole new environment for deception and destruction.
- Cyber-, bio-, and nano-revolutions will change the customer:
  - small, hi-tech forces
  - dramatically faster decision cycles
  - very robust communications infrastructures
- Smaller may not mean cheaper.
- Differential applications of small stuff will create extremely complex C^2 problems for friend and foe alike.
- Colocating sensing and analysis will fundamentally change the intelligence cycle in terms of time, resources and efficiency.

Insight 4: Veracity

The Challenge of Truth and Knowledge

- For thousands of years, knowledge has been passed through three sources—authority, empiricism, and revelation. Our look at these worlds suggests a fourth source: spontaneous knowledge available from the use of complex, interconnected global networks. This "new" source of knowledge will be silent on truth or falsehood.
- When knowledge takes on intrinsic value in the global economy, "unintended consequences" may result. Under certain conditions, something that is incorrect or false can become an accepted truth. Therein lie the seeds of illusion, deception, and—above all—change.
- Regardless of whether it arises from deliberate attack or from the innocent creation of false impression, knowledge will become one of the most powerful and frightening forces in a globally networked world.
- When coupled with shifting 21st Century loyalties and the reality of global perception management, knowledge will make vast, permanent change possible in short order.

Exploring Veracity

- In a world of instantaneous networks, what is false can become true, and what is true can become false. Therefore, the very concept of ground truth is dangerously limiting.
- In the progression from data through knowledge to insight, understanding what is knowable may be more important than differentiating between truth and falsehood.
- It may still be necessary to count tank barrels (a knowable truth). However, if that approach drives the effort to understand a complex, networked, multi-plane future, then significant threats will be missed.
- Some people have a need for truth (whether it exists or not), and someone will strive to profit from being the "arbiter of truth." Nonetheless, in a complex world, ambiguity is a constant companion and an instrument of power.
- The intelligence community may better positioned to understand these ideas than business.

Insight 5: Power

The Secret of Cortez

- In all of the worlds, the nature and/or distribution of power changed in significant ways. As values changed, there was an alteration in both power and the instruments of power.
- In a world of changing values, power is temporal. What power is today and what it will be tomorrow will depend on the extent to which values are shared or at least understood. Therefore, instruments of power accumulated over time—political, economic, cultural, military—will erode and perhaps become irrelevant.

- If you don't understand or have foresight into existing or emerging values, then you won't be able to understand the full dimensionality of power. If you don't understand the total dimensionality of power, then you will miss many of the instruments of power that can threaten you.

Exploring Power

- Focusing on the instruments of power instead of values, which are the wellsprings of power, risks strategic surprise.
- This is true whether you are focused on exploiting hostile instruments of power or building up your own.
- Technology is increasingly the key enabler for the classical pillars of power.
- You can be extremely vulnerable without being weak in any classical sense, including military power.
- Sensors are instruments of power because knowledge is a weapon.

Insight 6: Wealth

It's not Just Money

- Across the scenarios, the foundations of wealth and the concept of highly liquid and fungible assets included nontraditional "currencies" (*e.g.*, knowledge, safety, health, personal networks).
- These currencies and their interrelationships will be more vulnerable to manipulation than they are today.
- Significant threats to national wellbeing will emerge from shifts in the global economy. These threats might result from deliberate "attacks." Alternatively, they could be spawned by the confluence of myriad economic decisions that are, in turn, based on highly complex interactions and transaction flows.

Exploring Wealth

- Because strength and threats emerge from unexpected new sources of wealth, it is vital to understand the implications of new forms of economic value creation.
- Similarly, it is critical to track and understand the implications of economic and currency flows and transactions.
- There will be significant clashes between the need t monitor wealth and the desire for sanctuary.
- Even the largest actors cannot walk away from the interconnections of the global economy.
- Verification of trade and economic treaties will become a national security priority, leading to greater responsibilities for the Intelligence Community.

Insight 7: Herds

People and Ideas on the Move

- The emerging power and influence of nontraditional global organizations is not the issue that matters. What matters is the underlying "movement" of people and ideas.
- In each of the worlds, the intersection of changes in demographics, economics, and technology led to the creation of influential transnational and sub-national groups that reshaped how people viewed their identities and where they placed their loyalties.
- The loyalties and affinities that bind many people to organizations and groups—*e.g.*, corporations, religions, gated enclaves, factions, or advocacy groups—are complex, dynamic, fickle, and sometimes conflicting. Other people, however, adopt extremely narrow and rigid loyalties that shift only under extreme pressure.

Exploring Herds

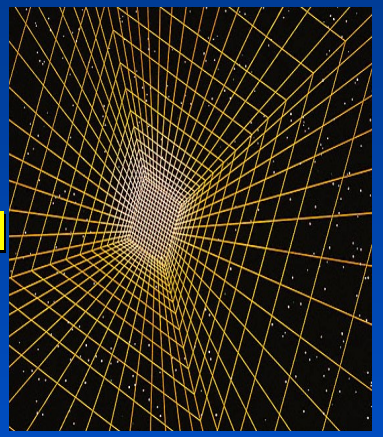
- All of the five worlds assigned a high value to sanctuary. Paradoxically, three of the worlds also placed a premium on the Intelligence Community's public reputation as an arbiter of truth.

- The Intelligence Community is made up of people who come to work in organizations. Like American society at large, the people of the future IC will be much less homogeneous than in the past, which is likely to create subtle—but potentially significant—internal shifts in perspectives and priorities.

- Conflicting loyalties will make the problems of recruiting and retaining high-quality, multi-disciplinary talent much more difficult in the future.

Insight 8: a Parallel Universe

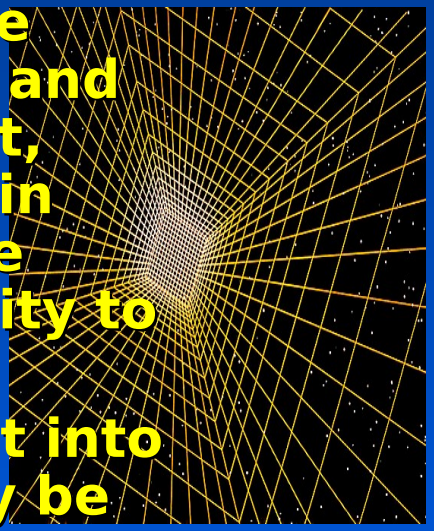
From Networks to Cyber Life



- The Internet is a river of wealth and power. Where it flows, “haves” arise; where it does not, “have-nots” arise.
- Across the scenarios, the scope of virtual enterprises and activities ranged from global schools and an electronic religion to a conduit for subversion, a definer of community, and a theater for corporate competition and warfare.
- Across every world—even when we tried to invent scenarios that minimized its relevance—cyberspace becomes a key enabler of human activity and an underpinning of the world order.
- We came to think of the internet less as a communications network and more as a new venue or destination. Metaphorically, cyberspace is a “Parallel Universe” that co-exists with and influences every aspect of the physical world.

Exploring A Parallel Universe

- Cyberspace is more temporal than physical, greatly magnifying the latency problem of "Starlight" (Prediction vs Reaction).
- Modeling Cyberspace as a parallel universe creates opportunities to invent new tools and sensors that can influence its development, operations, and enterprises. However, as in economics and other complex systems, the ability to influence does not imply the ability to control.



- Just as biological evolution gives us insight into how life in the physical world arose, it may be possible to devise an analogous framework to capture the evolution of digital "life forms."
- These independent life forms (software agents) will lead to unpredictable consequences as they interact within the complexity of Cyberspace.
- Cyberspace makes possible a world theater in which vast illusions and great deceptions can play out while the authors remain hidden in the

Insight 9: Bedfellows

The Significance of Teaming

- Global complexity accelerated in all the worlds, even when the US attempted to disengage. At the same time, the economic component of national security—everyone's national security—increased as the world economy and information infrastructure grew and tended to upstage military, diplomatic, and political components.
- Thus, in every case, national security changed—as did the logically derived intelligence functions, priorities, and players. Not only were there more players, but what the Intelligence Community needed to know was different.
- To be effective, the Intelligence Community needed new partners and new customers almost continually. As a result, the [illegible] static entity with well-[illegible]hronism.

Exploring Bedfellows

- Rapidly changing demands place a premium on organizational agility (*e.g.*, contingency planning, virtual organizations, and other flexible approaches) perhaps over technology investment.
- Efficiencies and additional resources may be gained through outsourcing of non-critical intelligence needs and building partnerships across intelligence and non-intelligence agencies, corporations, and NGOs.
- The concept of firewalls and tripwires may require expansion to establish real-time or predictive indications and warnings of situational changes with partners and customers (traditional and nontraditional).
- An unpredictable and shifting alignment of partners and competitors will bring significant complexity to roles and mission definitions.

Insight 10: Threat & Opportunity

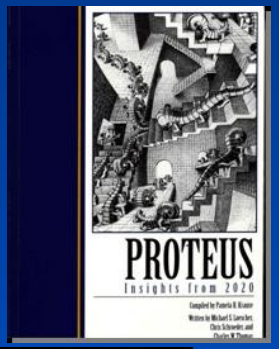
The Nature of Threat

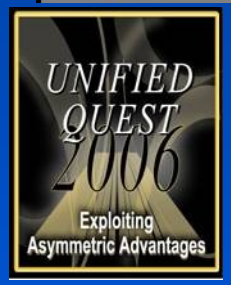
- Threat is omnipresent in the world, arising as it does from greed, ambition, desperation, and the enduring conditions of human character.
- In each of the worlds, the *nature of threat*—what was threatening and from whence threats arose–varied.
- We found that watchfulness in *all* venues—the physical, the virtual, the biological, and the temporal—was necessary to see the full spectrum of a given threat.

The more we looked at multidimensional activities, the more clearly we saw that the obverse of threat is always someone else's opportunity.

Future Global Environment

Characteristics, Threats and Opportunities





VULNERABILITY

Higher

Irregular

Challenges arising from the adoption or employment of unconventional methods by non-state and state actors to counter stronger state opponents—terrorism, insurgency, civil war, etc.

Catastrophic

Challenges involving the surreptitious acquisition, possession, and possible terrorist or rogue employment of WMD or methods producing WMD-like effects.

Higher

Traditional

Challenges posed largely by states employing legacy and advanced military capabilities and recognizable military forces, in long-established, well-known forms of military competition and conflict.

Disruptive

Future challenges emanating from competitors developing, possessing, and employing breakthrough technological capabilities intended to supplant our advantages in particular operational domains.

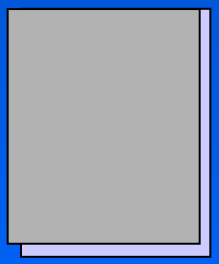
Lower

Lower

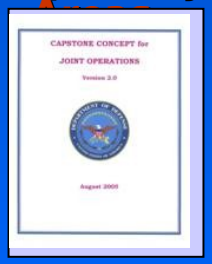
LIKELIHOOD

- Proteus Insights
- Planes of Influence
- Discrete Temporal Relationships/Patterns
- Complex characteristics
- Nonlinear Modeling
- Finite Threats/Opportunities

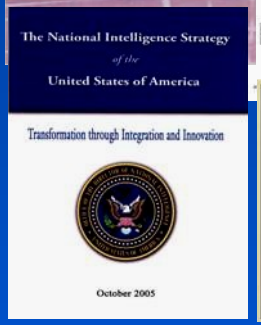
Studies, Simulations, Gaming

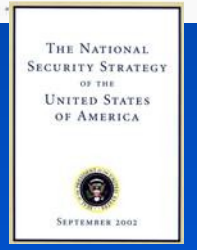


Joint Concepts/ Capability

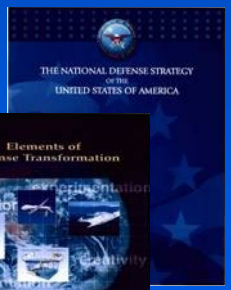


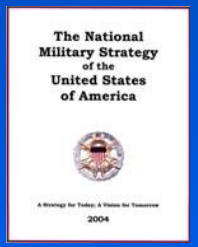
Intelligence



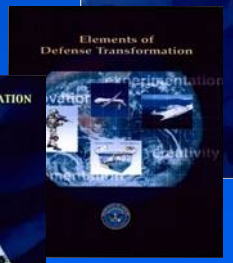


Strategy





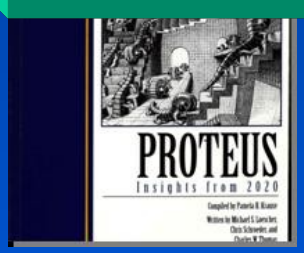
Transformation



Proteus Lenses

Strategic Context: National Security Policy and

- Proteus Insights
- Planes of Influence
- Discrete Temporal Relationships/Patterns
- Complex characteristics
- Nonlinear Modeling
- Finite Threats/Opportunities



National Security Policie

Executive Steering Groups

PCCs: 24 Functional, 6 Regional

Committees (PCCs)

NSC STAFF OSD STATE HLS DN JOINT STAFF

Interagency Discussion on ssue

DIME/MIDLIFE

- Conceptualization

5 Interagency interrelated els of policy:

- Articulation
- Budgeting
- Implementation
- Post Implementation

Decision on Issue Becomes: National Security Policy

Principals Committee (PC)

NSC ADVISOR SECSTAT SECDEF CJCS SECHLS DN

Deputies Discussion on Issue

Deputies Committee (DC)

DEPNSC ADVISOR DEPSEC STATE VCJCS DEPSEC HLS DEPSEC DEF DEPDNI

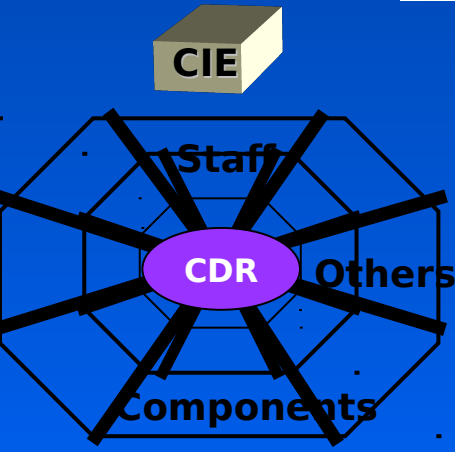
***Other executive depts, agencies, as required*

Proteus Lenses

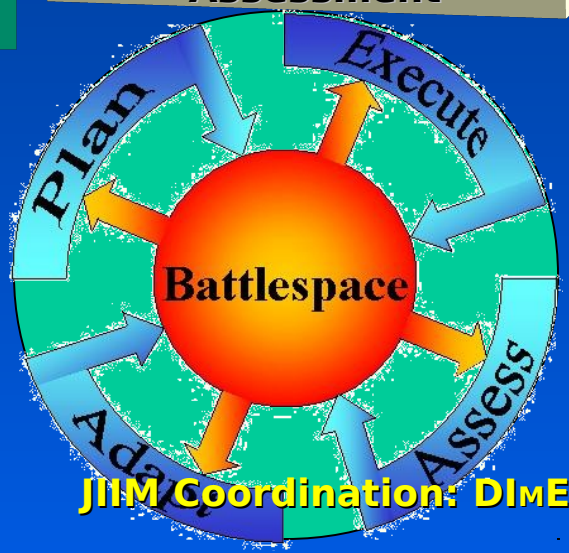
Operational Level: Effects Based Operations (EBO), Operational Net Assessment (ONA) & Collaborative Information Environment (CIE)

- Proteus Insights
- Planes of Influence
- Discrete Temporal Relationships/Patterns
- Complex characteristics
- Nonlinear Modeling
- Finite Threats/Opportunities

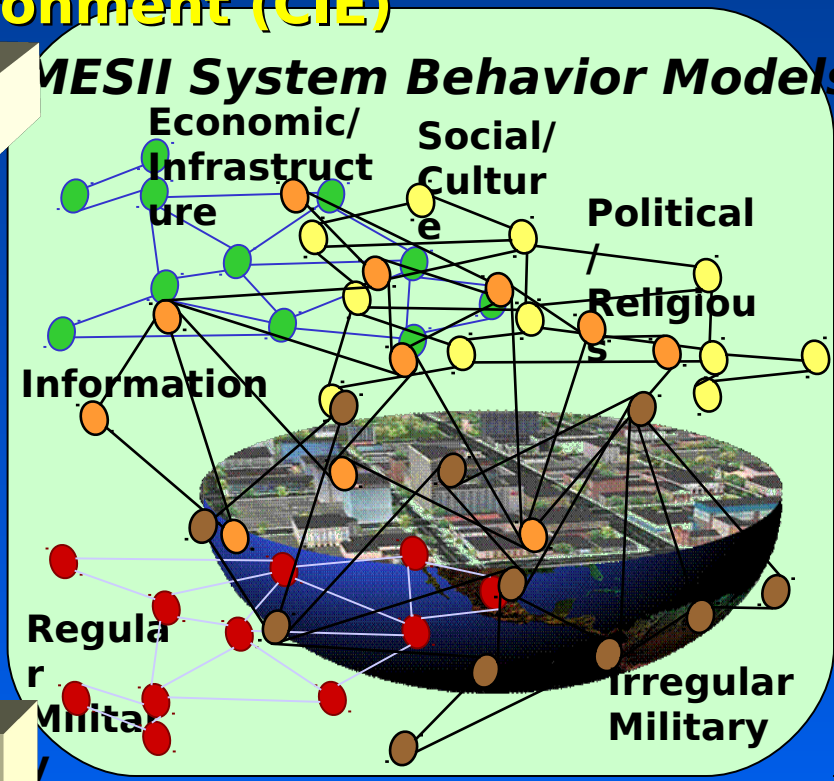
PROTEUS
Insights from 2020
Compiled by Pamela H. Krause
Written by Michael S. Loescher, Chris Schroeder, and Charles W. Thomas



Operational Net Assessment



Effect-Based Planning and Operations



Proteus

Exploring the Possibilities

- <u>Educational Exercises/Experiential Learning</u>. Learning role playing, games, and simulations that either require user/student input or incorporate Proteus Insights in the simulation, course work, hypothetical case studies/scenarios, and a future "Proteus Gaming."
- <u>Publication</u>. Proteus related publications in education & experiential learning and decision and analytical support tools and emerging technologies
- <u>Analysis and Decision Support</u>. Applicability of PI in strategic and operational analysis and decision-making; i.e. decision-making toolkits, expert agents, models and/or simulation
- <u>Future Research</u>. Study into new insights and work on future Proteus applications

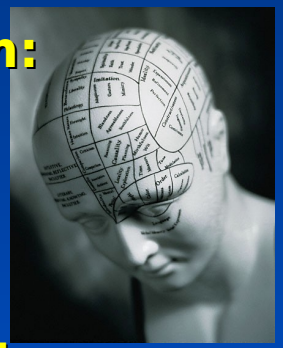
Functional focus

Audiences & Customers

- Strategic Communications and Public Diplomacy
- Information Operations: Civil Military Affairs, Psychological Operations
- Public Affairs (Media Operations; all levels)
- Strategic and Operational Intelligence
- Joint Forces planning and decision making (Adaptive and Contingency Planning across the range of military operations)
- Interagency Planning and Decision-making Processes

Proteus Management Group

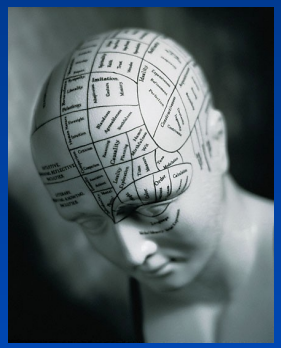
"A Productive First Year"



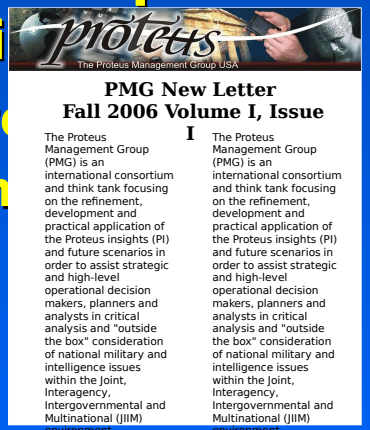
- **Organization and Implementation of PMG consortium:**
  - ✓ Established Charter and Execution Plan, Board of Directors (CSL, NSA, NIU, NPS)
- **Marketing, Recruiting, and Outreach:**
  - ✓ Established 400+ Contacts across the communities (210+ members: @ 35 Fellows and 175 Associates)
  - ✓ Developed Proteus Master Briefs, Information tri-fold, posters, and advertisements
  - ✓ Launched PMG Web site (4,000+ hits in FY 06)
  - ✓ Conducted a "well-received" inaugural Workshop
- **Publications (PMG Members):**
  - ✓ 17 Workshop Papers, 2 Proteus Papers,
  - ✓ 2 CSL Articles, 7 Monographs
- **Research (Complexity Modeling, Simulations, Gaming)**
  - ✓ Conducted a survey of community initiatives and requirements
  - ✓ Demonstrated the Protean Media to potential users; garnered support for continued development. (JFCOM, DIA, DoS, DMSO, USAWC, Army TRADOC)

Proteus Management Group

2007 Initiatives



- **Marketing, Recruiting, and Outreach (Ongoing):**
  - **Increase Membership to 300+ by:**
    - **Expanded Search for potential contact Information and advertising venues.**
    - **Aggressive email, phone, and personal contact marketing campai**
    - **Quarterly PMG News Lett**
      - **News and Announcemen**


proteus
The Proteus Management Group USA
PMG New Letter
Fall 2006 Volume I, Issue I
The Proteus Management Group (PMG) is an international consortium and think tank focusing on the refinement, development and practical application of the Proteus insights (PI) and future scenarios in order to assist strategic and high-level operational decision makers, planners and analysts in critical analysis and "outside the box" consideration of national military and intelligence issues within the Joint, Interagency, Intergovernmental and Multinational (JIIM) environment.
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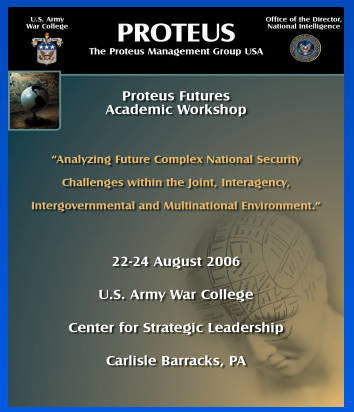
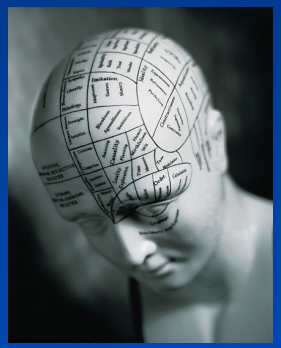
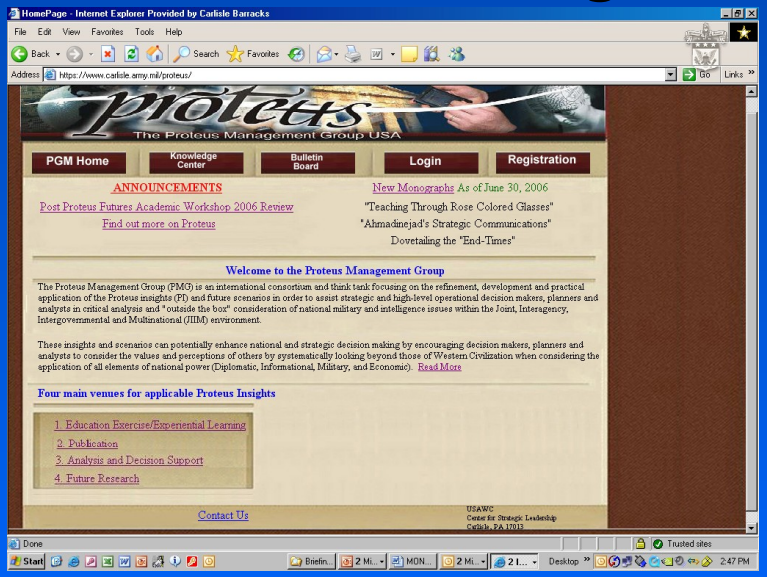

U.S. Army War College
PROTEUS
The Proteus Management Group USA
Office of the Director, National Intelligence
Proteus Futures Academic Workshop
"Analyzing Future Complex National Security Challenges within the Joint, Interagency, Intergovernmental and Multinational Environment."
22-24 August 2006
U.S. Army War College
Center for Strategic Leadership
Carlisle Barracks, PA

Proteus Management Group

2007 Initiatives

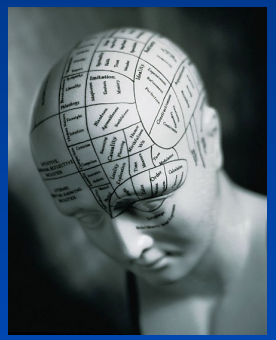


- **Website Enhancements (DEC 07)**
  - ✓ Phase I: Registration & Login
  - ✓ PHASE II: Dynamic Membership Database
  - Phase III: Blog
  - Phase IV: Content Management Utility Tool


HomePage - Internet Explorer Provided by Carlisle Barracks
Proteus
The Proteus Management Group USA
PGM Home
Knowledge Center
Bulletin Board
Login
Registration
ANNOUNCEMENTS
Post Proteus Futures Academic Workshop 2006 Review
Find out more on Proteus
New Monographs As of June 30, 2006
"Teaching Through Rose Colored Glasses"
"Ahmadinejad's Strategic Communications"
Dovetailing the "End-Times"
Welcome to the Proteus Management Group
The Proteus Management Group (PMG) is an international consortium and think tank focusing on the refinement, development and practical application of the Proteus insights (PI) and future scenarios in order to assist strategic and high-level operational decision makers, planners and analysts in critical analysis and "outside the box" consideration of national military and intelligence issues within the Joint, Interagency, Intergovernmental and Multinational (JIIM) environment.
These insights and scenarios can potentially enhance national and strategic decision making by encouraging decision makers, planners and analysts to consider the values and perceptions of others by systematically looking beyond those of Western Civilization when considering the application of all elements of national power (Diplomatic, Informational, Military, and Economic). Read More
Four main venues for applicable Proteus Insights
1. Education Exercise/Experiential Learning
2. Publication
3. Analysis and Decision Support
4. Future Research
Contact Us
USAWC
Center for Strategic Leadership
Carlisle, PA 17013

Proteus Management Group

2007 Initiatives



- **Futures Intelligence Curriculum (MAY07)**
  - Classroom Seminar+ PM Game: 3, 6, & 15-hour POI.
  - Focus Subject Areas:
    - Futures Research, Studies emerging PI-related Concepts
    - Advanced Analytical Techniques
    - Holistic Systemic Framing, Creative/Critical Thinking (PI Application: "how" to think vs. "what")
    - Complex Adaptive Systems & Complexity Ga (Protean Media)
    - C ct
      c os

Futures Research Studies, Advanced Analytical Techniques

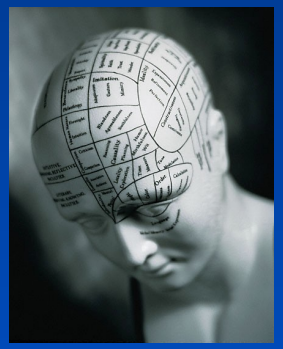
Future Environment: actors, domains/planes

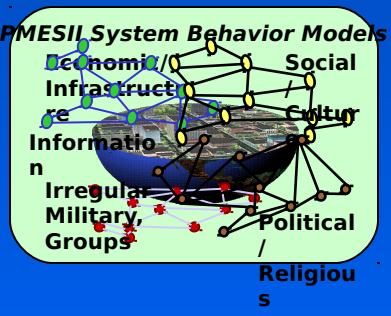
Futures Intelligence Curriculum Workshop
Mercyhurst College, 4-7 December

Proteus Management Group

2007 Initiatives

- **Complexity Gaming Enterprise (DEC 06)**
  - **An Online Forum for sharing and examining ideas and initiatives on serious gaming to enhance modeling and simulation efforts for experiential education decision making.**
    - **Focus is on developing interactive Role Playing Simulations (RPS) or a family of RPS that portrays a Regional Synthetic Environment that displays with fidelity the physical and virtual domains as background and emphasizes entity belief systems, their resultant actions, interactions, and interrelationships within a complex adaptive systems.**



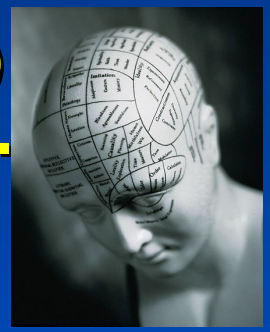


CGE VTC and Web Blog (FEB 07)

Proteus Management Group

2007 Initiatives

- **Protean Media Enhancements: (JUN 07)**
  - Incorporate advanced concepts from CGE input.
  - Add fidelity and granularity to the background: Political, Military, Economic, Social, Infrastructure, Information (PMSEII).
  - Create an Instructor Dashboard to adjust relative power of entities/actions
  - Provide capability to vary and scale “wrappers” easily.
  - Provide an analytical function for player assessor review
  - Examine feasibility to Integrate into Disciple and an Expert agent (TBD).



PM Requirements VTC
CSL, USAWC, 1 November 06

Protean Media Critical Thinking Game

Goal:

- **Continue to improve upon/develop a "scalable variable wrapper agent based interactive" experiential education and planning & implementing tool/game that identifies cascading 2nd 3rd order effects and unintended consequences in complex environments, by incorporating the complex, temporal and changing effects of human-behavior/belief systems and social/cultural dimensions across the "planes of influence"**

Technology Requirements:

- **Continue to integrate advances of R&D from: gaming, belief systems/influence models, perception and cognitive modeling and other complex-nonlinear programming efforts ("Paradoxal" Game)**

Participants

- **Naval Post Graduate School (MOVES)**
- **CSL, USAWC**
- **Proteus Canada**
- **Learning Agent Center, George Mason University**
- **DNI (NIU)**
- **U.S. Army Training and Doctrine Command**
- **Others**

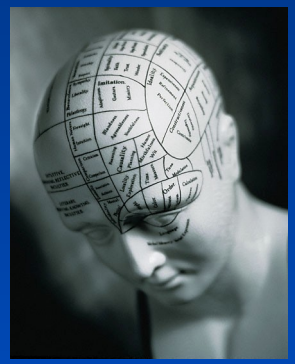
Schedule:

- **Requirements Determination: Completed**
- **Game Design Improvement Plan : February 07**
- **Design and Programming July /August 07**

POC: John Hiles,MOVES, NPS 831-656-2988 jehiles@nps.edu
POC:Bill Waddell PMG, CSL 717-25-4222 william.waddell@us.army.mil
POC: Bill Wimbish PMG, CSL 717-245-3366 william.wimbish@us.army.mil

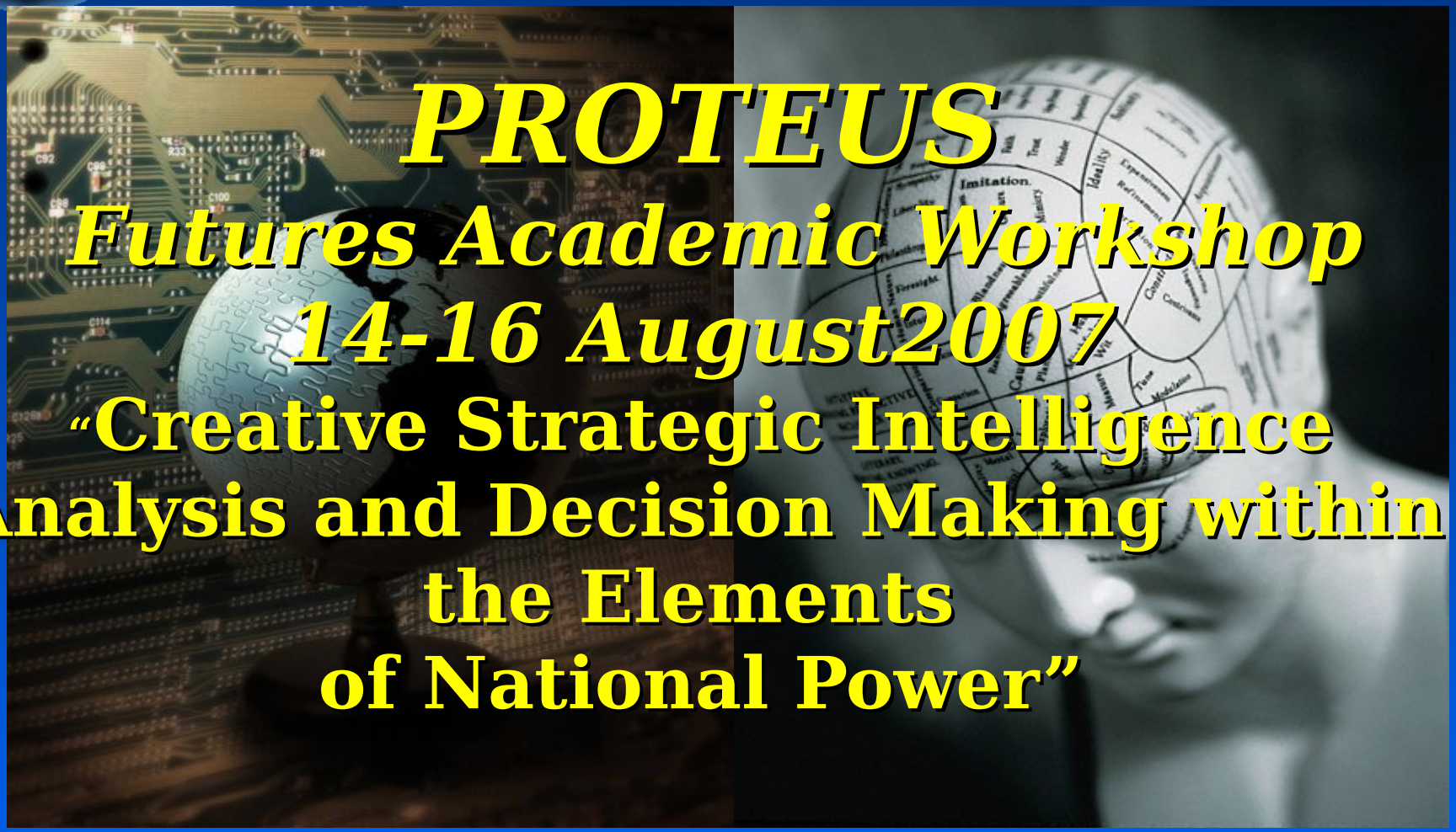
Proteus Management Group

2007 Initiatives



- **Publication and Research**
  - 4 Proteus Monographs (MAY 07)
    - Funded Proteus Monograph Series Fellow Program (PMSFP)
    - Scholarly papers for internal or external publication.
    - PMG (NIU/CSL, USAWC) sponsored: @7,5 00 + words
  - 2 Proteus Papers and Articles (JAN/JUL)
    - Proteus related topic for internal or external publicatio
    - PMG (NIU/CSL, USAWC) sponsored: @3,000 + words
  - 4 PMG Quarterly News Letter
    - News, Information, and event announcements
    - Information/reviews on Proteus related workshops/conferences, studies and research Projects, PMG members in print, etc.
  - Graduate Scholar Research and Writing Award
    - Proteus Writing Excellence Award (PWEA)

Proteus Management Grou



PROTEUS

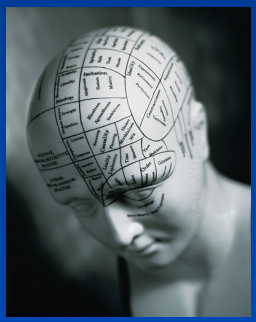
Futures Academic Workshop

14-16 August2007

"Creative Strategic Intelligence Analysis and Decision Making within the Elements of National Power"

Proteus Workshop 2007

Objective

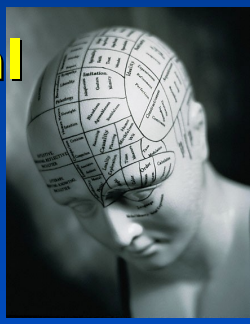


- **Promote further discourse, showcase studies, and research in order to gain foresight and cope with future uncertainty and complexity.**
- **The focus of this effort will be on the refinement, development, and application of Proteus Insights (PI) and related new and emerging "futures" concepts, methods, processes, and scenarios in *strategic intelligence analysis and decision making.***

Proteus Workshop 2007

Purpose

Assist strategic and high-operational level decision makers, planners and analysts within the Joint, Interagency, Intergovernmental, and Multinational (JIIM) community in "outside the box" consideration and critical *analysis of National security, military and intelligence issues* by encouraging them to:

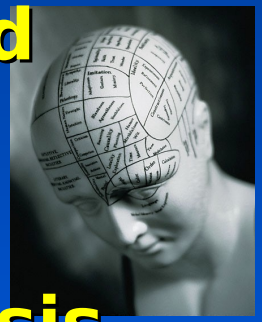


- **Consider differing values and perceptions of future target audiences by systematically looking "outside" of the values held in Western Civilization when considering the application of all elements of national power (Diplomatic, Informational, Military, and Economic).**
- **Frame complex issues holistically, to identify and consider the 2nd and 3rd order effects and unintended consequences of policy and strategy decisions.**
- **Scan the horizon and define the future environment to systematically identify discrete threats and capitalize on hidden opportunities**

Proteus Workshop 2007

Workshop Annual Series Theme:

"Analyzing Complex Future National Security Challenges within the Joint Interagency, Intergovernmental and Multinational Environment"



2007 Workshop Specific Theme:

"Creative Strategic Intelligence Analysis and Decision Making within the Elements of National Power: Diplomatic, Information, Military and Economic"

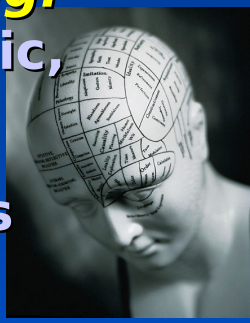
Proteus Workshop 2007

Workshop Panels

Examples of Papers and Presentation Topics

1. ***Creative Strategic Approaches to Future Intelligence Analysis and Political and Diplomatic Decision Making:***

- National policies and strategies for political domestic, regional and global stability
- Understanding national psyches: the composite of political, demographics, cultural, social and religious beliefs, discrete complex interrelationships and resultant actions



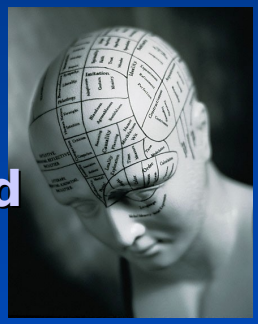
2. ***Creative Strategic Approaches to Intelligence Analysis and Decision Making in Information Operations and Strategic Communication:***

- Understanding the intricacies and nuances of perception management and integrated development of themes and messages
- Understanding human terrain and the cognitive dimension, e.g. social networks, psyche, bias, cultural and religious beliefs

Proteus Workshop 2007

Workshop Panels

Examples of Papers and Presentation Topics



3. *Creative Strategic Approaches to Future Intelligence Analysis and Decision Making in 21st Century Military Operations:*

- Understanding the multifaceted, multi-dimensional and integrated aspects of future conflict
- Trend analysis and new ways and methodologies of prosecuting war and keeping the peace

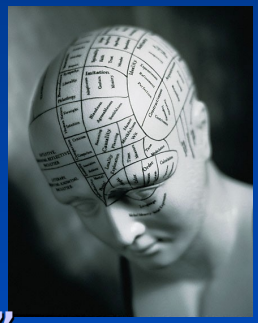
4. *Creative Strategic Approaches to Future Intelligence Analysis and Decision Making in Economic Policy and Strategy:*

- Understanding of the multi-dimensional aspects and Impact of Globalization and its future effect on the United States' economic wellbeing
- Futures economic scenario development and intelligence and trend analysis
- Integrated and holistic policies and strategies for future economic sustainability and growth, domestically and internationally

Proteus Workshop 2007

Workshop Panels

Examples of Papers and Presentation Topics



5. *Future Technology Convergence, Advanced Scientific Approaches, Strategic Scenario Development, and Simulation, Modeling and Gaming that enhances Intelligence Analysis, Decision Making and Problem Solving processes in National Diplomacy, Military Strategy, Information Operations and Economic Policy:*

- **Protean Insight lenses application and integration into “futures” concepts**
- **Technologies and scenarios that threaten U.S. interests and future strategic sustainability or provide discreet opportunities**
- **Complexity modeling, simulation and gaming that supports the above**